

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Yee-Chia Yeo et al.

Serial No.: Not Known Yet


Group Art Unit: Not Known Yet

Filed: 04/16/2003

Examiner: Not Known Yet

For: **GATE ELECTRODE FOR A SEMICONDUCTOR FIN DEVICE**

I hereby certify that this correspondence is being deposited with the United States Postal Service on the date shown below with sufficient postage as EXPRESS MAIL LABEL NO. EV 398572652 US addressed to: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

4/16/2004  
Date  
  
Chris Lambriodes

**INFORMATION DISCLOSURE STATEMENT  
TRANSMITTAL LETTER**

Dear Sir:

Enclosed herewith is an Information Disclosure Statement pursuant to 37 CFR.  
§ 1.56 in connection with the above-identified application, which statement is being filed:

- ☒ [ X ] Together with the present application.
- ☐ [ ] Before the first Office Action on the merits or three (3) months from the filing date of this application, whichever occurs last. **[37 CFR § 1.97(b)]**
- ☐ [ ] After the first Office Action on the merits, but before a Final Office Action under §1.113 or Notice of Allowance under §1.311, whichever occurs first. **[37 CFR § 1.97(c)]**
- ☐ [ ] After a Final Office Action under §1.113 or Notice of Allowance under §1.311, but prior to or with payment of the Issue Fee. **[37 CFR § 1.97(d)]**

Consistent with Applicant's obligations pursuant to 37 CFR §§1.97 and 1.98, the following requirements have been met:

☒ No separate requirements are needed.

☒ No additional fee is required.

☐ **Fee Under 37 CFR § 1.97(c)**

The fee of \$180.00 for submission of an IDS under § 1.97(c) as set forth in § 1.17(p) accompanies this statement.

☐ **Fee Under 37 CFR § 1.97(d)**

The fee of \$180.00 for submission of an information disclosure statement under § 1.97(d) set forth in § 1.17(p) accompanies this statement.

☐ **Certification Under 37 CFR § 1.97(e)**

- ☐ Each item of information contained in this statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement; or
- ☐ No item of information contained in this statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the statement after making reasonable inquiry, no item of information contained in this statement was known to any individual designated in §1.56(c) more than three months prior to the filing of this statement.

**Provision of Copies of References**

☒ A copy of each of the non-U.S. patent references listed on the attached Form PTO-1449 is enclosed herewith and forms a part hereof.

☐ Partial Translation is enclosed herewith and form a part hereof.

☐ A copy of the European Search Report from a corresponding or related EPO application is enclosed herewith.

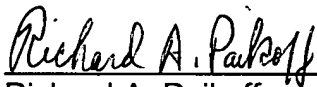
- ☐ A copy of the International Search Report from a corresponding or related PCT application is enclosed herewith.

**Identification of Prior Application(s) In Which Listed Information Was Already Cited And For Which No Copies Are Submitted Or Need Be Submitted**

- ☐ This application relies, under 35 U.S.C. § 120, on the earlier filing date of prior U.S. Application No(s). . The following references were submitted to, and/or cited by, the Office in the prior application(s) and therefore are not required to be provided in this application:
- ☒ The Commissioner is hereby authorized to charge any fees associated with this communication or credit any overpayment to Deposit Account No. 04-1679. A duplicate copy of this transmittal is attached.

Respectfully submitted,

DATE: 4/16/04

  
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Richard A. Paikoff  
Registration No. 34,892  
Attorney for Applicant(s)

DUANE MORRIS LLP  
One Liberty Place  
Philadelphia, PA 19103-7396  
Telephone: 215-979-1853  
Fax: 215-979-1020

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Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1

of 2

**Complete if Known**

Application Number	Not Known Yet
Filing Date	04/16/2004
First Named Inventor	Yee-Chia Yeo
Art Unit	Not Known Yet
Examiner Name	Not Known Yet
Attorney Docket Number	N1085-00180

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	A	US- 6,252,284	06-26-2001	Muller et al.	
	B	US- 6,391,695	05-21-2002	Yu	
	C	US- 6,391,782	05-21-2002	Yu	
	D	US- 6,413,802	07-02-2002	Hu et al.	
	E	US- 6,432,829	08-13-2002	Muller et al.	
	F	US- 6,451,656	09-17-2002	Yu et al.	
	G	US- 6,492,212	12-10-2002	leong et al.	
	H	US- 6,525,403	02-25-2003	Inaba et al.	
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**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				

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SignatureDate  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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<b>First Named Inventor</b>	Yee-Chia Yeo
<b>Art Unit</b>	Not Known Yet
<b>Examiner Name</b>	Not Yet Assigned
<b>Attorney Docket Number</b>	N1085-00180

Sheet 2 of 2

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	I	X. Huang et al., "Sub-50 nm P-Channel FinFET", IEEE Transactions On Electron Devices, Vol. 48, No. 5, May 2001, Pages 880-886	
	J	F.-L. Yang et al., "35nm CMOS FinFETs", 2002 Symposium On VLSI Technology Digest of Technical Papers, June 2002, Pages 104-105	
	K	H.-S. P. Wong, "Beyond the conventional transistor", IBM J. Research and Development, Vol. 46, No. 2/3, March/May 2002, Pages 133-168	
	L	R. Chau et al., "Advanced Depleted-Substrate Transistors: Single-gate, Double-gate and Tri-gate" (Invited Paper), 2002 International Conference on Solid State Devices and Materials, Nagoya, Japan, September 2002, Pages 68-69	
	M	F.-L. Yang et al., "25 nm CMOS Omega FETs", International Electron Device Meeting, Dig. Technical Papers, Dec. 2002, Pages 255-258	
	N	J. P. Colinge et al., "Silicon-On-Insulator 'Gate-All-Around Device' ", International electron Device Meeting, Dig. Technical Papers, Dec. 1990, Pages 595-598	
	O	E. Leobandung et al., "Wire-channel and wrap-around-gate metal-oxide-semiconductor field-effect transistors with a significant reduction of short channel effects", J. Vacuum Science and Technology B, Vol. 15, No. 6, Nov./Dec.1997, Pages 2791-2794	

Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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